

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/030039 A3

- (51) International Patent Classification⁷: **C12Q 1/68**
- (21) International Application Number:
PCT/US2004/031481
- (22) International Filing Date:
23 September 2004 (23.09.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/505,527 23 September 2003 (23.09.2003) US
- (71) Applicant (for all designated States except US): UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL [US/US]; 308 Bynum Hall, Campus Box 4105, Chapel Hill, North Carolina 27599-4105 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): STAFFORD, Darrel, W. [US/US]; 300 Rainbow Drive, Carrboro, North Carolina 27510 (US). LI, Tao [CN/US]; 7585 Charmant Drive, Apt. 807, San Diego, California 92122 (US).
- (74) Agent: MYERS BIGEL SIBLEY & SAJOVEC, P.A.; P.O. Box 37428, Raleigh, North Carolina 27627 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
21 July 2005
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOSITIONS FOR THE CORRELATION OF SINGLE NUCLEOTIDE POLYMORPHISMS IN THE VITAMIN K EPOXIDE REDUCTASE GENE AND WARFARIN DOSAGE

(57) Abstract: The present invention provides a method of identifying a human subject having increased or decreased sensitivity to warfarin, comprising detecting in the subject the presence of a single nucleotide polymorphism in the VKOR gene, wherein the single nucleotide polymorphism is correlated with increased or decreased sensitivity to warfarin, thereby identifying the subject having increased or decreased sensitivity to warfarin.